

**HAHN AND ASSOCIATES, INC.**  
ENVIRONMENTAL CONSULTANTS

February 15, 2016

Mr. Dana Bayuk  
Oregon Department of Environmental Quality  
Northwest Region, Portland Office  
Portland Harbor Section  
700 NE Multnomah Street, #600  
Portland, Oregon 97232

HAI Project No. 2708  
DEQ ECSI File No. 84

**SUBJECT: Progress Report, NW Natural Site, 7900 NW St. Helens Avenue and  
7200 NW Front Avenue, Portland, Oregon**

Dear Mr. Bayuk:

Hahn and Associates, Inc. (HAI) has prepared this monthly Progress Report to summarize Remedial Investigation/Feasibility Study (RI/FS) and source control-related work activities conducted by NW Natural relating to historic manufactured gas plant (MGP) activities at the NW Natural Site during the month of January 2016. NW Natural is completing upland investigation and cleanup activities at the NW Natural Site under the Voluntary Agreement No. ECVC-WMCVC-NWR-94-13 (Voluntary Agreement) between NW Natural and the Oregon Department of Environmental Quality (DEQ).

**1.0 Communications and Document Submittals**

In correspondence dated January 6, 2016 (Dana Bayuk to Halah Voges and Ben Hung), DEQ provided comments from review of a December 9, 2015 meeting regarding integration of the northern Siltronic Site into the ongoing Gasco Uplands FS process.

Project manager calls were conducted with DEQ on January 5, 2016, and January 27, 2016 to discuss NW Natural project status and schedules.

Program management implementation calls were conducted with DEQ on January 7, 2016 and January 28, 2016 to discuss overall NW Natural program management and project schedules.

A meeting with representatives of NW Natural and DEQ was conducted on January 8, 2016 to discuss integration of the northern Siltronic Site into the Gasco Site Feasibility Study.

In correspondence dated January 15, 2016 (Jen Mott to Dana Bayuk), Anchor QEA, on behalf of NW Natural, transmitted a detailed tabulation of the existing groundwater monitoring program as currently approved for NW Natural implementation at the Gasco and Siltronic properties.

In correspondence dated January 15, 2016 (Jen Mott to Dana Bayuk), Anchor QEA, on behalf of NW Natural, provided monthly HC&C system figure sets as part of the routine HC&C system reporting.

In correspondence dated January 25, 2016 (Dana Bayuk to Halah Voges), DEQ provided feedback from review of the FS Data Gap Investigation slides as presented during a November 16, 2015 FS check-in meeting.

A Gasco Uplands FS check-in meeting with representatives of NW Natural and DEQ was conducted on January 26, 2016.

In correspondence dated January 26, 2016 (Dana Bayuk to Pradeep Mugunthan), DEQ approved moving forward with NW Natural's recommendations for 1) model calibration and 2) instrumentation of select Fill WBZ wells with pressure transducers.

A meeting with representatives of NW Natural and Siltronic occurred on January 28, 2016 to discuss content, formatting, and a schedule for data exchange activities as related to Siltronic and NW Natural RI completed on the Siltronic property.

In correspondence dated January 29, 2016 (Jen Mott to Dana Bayuk), Anchor QEA, on behalf of NW Natural, transmitted the groundwater chemistry database updated to contain results from the September / October integrated sampling event.

## **2.0 Field Work**

On January 28, 2016 representatives of Keenan Advantage Group, Inc. (Keenan) completed a direct push soil and groundwater investigation on the Koppers, Inc. leasehold portion of the Gasco property proximate to the off-site location of the December 13, 2015 gasoline tanker truck crash, spill, and fire. Golder Associates, Inc. (Golder) completed the investigation on behalf of Keenan, with representatives of NW Natural and the DEQ Emergency Response Program present. Golder installed seven borings for screening of soil and collection of groundwater samples along the property fence line to evaluate for impacts attributable to the Keenan gasoline spill.

HAI field activities related to monitoring and maintenance of the dense non-aqueous phase liquid (DNAPL) extraction system at surficial fill well locations MW-6-32 and MW-13-30 occurred during January 2016. The system recovered approximately 42 gallons of fluids in January, primarily DNAPL.

Tasks related to optimization and maintenance of the HC&C system and the groundwater treatment system were conducted in January 2016, with the system operating under Phase 2 testing parameters since July 21, 2015.

Baseline DNAPL removal as needed to maintain at levels below the top of the well sumps was conducted by Anchor QEA during January 2016 in the following wells near the river shoreline.

- MW-18-30
- MW-26U
- MW-27U
- MW-38U
- MW-PW2L
- PW-2L
- PW-13U
- PW-14U

On March 31, 2014 NW Natural discontinued routine discharges of treated groundwater to the sanitary sewer (Industrial Wastewater Discharge Permit 500.022). During January 2016 all water was directed to NW Natural's on-site wastewater treatment plant and discharged to the Willamette River consistent with National Pollutant Discharge Elimination System (NPDES) Permit No. 103061 (expires August 31, 2018). Results

from NW Natural's NPDES effluent sampling are provided to DEQ in Discharge Monitoring Reports that are submitted on a monthly basis in accordance with the permit. A total of 13,561,958 gallons of treated water were discharged under the NPDES permit during January.

### **3.0 Anticipated Activities and February and March 2016**

NW Natural and DEQ technical working group communications and meetings are anticipated to occur as needed during February and March 2016 to discuss ongoing project tasks.

The draft Feasibility Study Work Plan for the Gasco Uplands will be under development during the indicated time-frame, with DEQ check-in meetings during plan development.

Installation of replacement groundwater extraction well PW-1Ub is anticipated to occur in February 2016 (mobilization occurred on February 8, 2016).

The *HC&C Model Calibration and Validation Report* will be prepared for submittal to DEQ after agreements with the agency are reached and associated refinements are incorporated.

Long-term HC&C system operation, initiated during July 2015 and initially approved through May 2016, will continue.

Preparation and transmittal of monthly HC&C system Figure sets will occur during the indicated timeframe as part of the routine HC&C system reporting requested by DEQ.

A Contaminated Materials Management Plan is being prepared for submittal in early 2016.

The *Groundwater Treatment System Operations and Maintenance Manual*, prepared by Severson Environmental Services, Inc., dated May 2015 is being updated based on feedback provided by DEQ and DOJ and will be resubmitted in early 2016.

Initiation of supplemental Doane Creek investigation activities will occur in early 2016 after receipt of the final executed copy of the access agreement with Burlington Northern & Santa Fe Railway Company (received January 29, 2016).

Planning and preparations for completion of the RI/RA Addendum for the northern portion of the Siltronic property will be underway during the indicated timeframe.

Additional information relative to the groundwater model as agreed during a December 2, 2015 modeling meeting will be compiled and provided to DEQ during the indicated timeframe.

The following reports and work plans for the Site have been submitted to DEQ through the date of this progress report. Unless otherwise noted, NW Natural has not received DEQ comments on these documents.

- *Fill WBZ Trench Design Evaluation Report, Gasco/Siltronic*, prepared by Anchor QEA, dated April 8, 2015.
- *Hydraulic Control and Containment (HC&C) System Operation and Maintenance (O&M) Manual*, prepared by Anchor QEA, dated May 1, 2015.
- *HC&C Capture Performance and Monitoring Plan (PMP)*, prepared by Anchor QEA, dated May 1, 2015.

- *Evaluation of Location of Former Industrial Use Water Supply Well Mult 802, NW Natural Gasco Property, Portland, Oregon*, prepared by Hahn and Associates, Inc., dated November 11, 2015.
- Tabulation of the *Current Groundwater Monitoring Program* as approved for NW Natural implementation at the Gasco and Siltronic properties, transmitted January 15, 2016. This document needs DEQ feedback and incorporation of Siltronic's current groundwater monitoring program in order to achieve DEQ's objective of a holistic / comprehensive document.

Should you have any questions, please contact the undersigned.

Sincerely,



Rob Ede, R.G.  
Principal

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